

## RPU Measurement

1. Using 96 well plates
2. Inoculate cells for 15 hours. The positive control for the experiment is BBa\_I20260 which contains constitutive promoter J23101 and GFP generator.
3. Dilute cells into 0.05 OD, and induce by different level of arabinose (0%, 0.2%, 0.4%, 0.6%, 0.8%, 1%)
4. Wait for 4 hours, and measure the OD and fluorescence of the cells using EnVision multilabel reader from Perkin Elmer Company.
5. Measure every 30 minutes span, for 2 hours.
6. Calculate the RPU (Relative Promoter Unit) based on the paper “Measuring the activity of BioBrick promoters using an in vivo reference standard” by Kelly et al.